NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.



SHARING LESSONS LEARNED

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.

DISCLAIMER: Provision of this report by NIOSH does not constitute endorsement of the views expressed or recommendation for the use of any commercial product, commodity or service mentioned. The opinions and conclusions expressed are those of the authors and not necessarily those of NIOSH. More reports on Safer Medical Device Implementation in Health Care Settings can be found at http://www.cdc.gov/niosh/topics/bbp/safer/

Phase 4 Report – Evaluating Safer Medical Devices

Facility Background

We represent a small Home Health Agency, characterized by a daily average census of 25 patients. Our patient population is primarily geriatric. This agency is Medicare and Medicaid certified. Our Medicare license is for one county. We have a multi-cultural work force, consisting of 11 employees. One fulltime RN case manager, one RN on call, one Physical Therapist, two Occupational Therapists, two Home Health Aides (one does primarily office billing, referral coordination ect.). The Medical Social Worker, and Dietician are shared staff with the parent company and work out of their offices. The agency contracts for a Speech Language Pathologist staff as needed. The home health agency office is located on the administrative floor of a skilled nursing facility. The skilled nursing facility is our parent company. The home health agency utilizes the parent company for supply management and other additional support.

Evaluation Process

The anticoagulation machine, test strips, electronic quality control, liquid quality control solution, lancets, instruction book, instruction video, and carrying case were delivered to the facility. The Sharps Injury Prevention Team (comprised of the core nursing staff in the facility) was selected to do the evaluation.

Initially I taught myself to be the trainer. I utilized the company's video, website, instruction book and test. I organized the material into a self-learning module and a hands-on component. All nurses working in the home health agency went through the training, did a demonstration (lab setting) and then a supervised direct patient care test. The training lasted 45 minutes in the agency and then included one home health visit, which lasted approx 1.5 hours (includes driving and documentation).

The machine was evaluated for 1 week based on the fact that multiple blood draws needed to be done. After each use the clinician was asked a series of questions:

- Ease of use of machine
- Ease of use of safety lancet
- Ease of transport
- Patient's response to treatment
- Ease of follow through of blood work results

This was a verbal communication between the staff member and myself. One nurse received an error message from the machine. Upon her direct observation of watching another staff member discovered it was due to finger stick technique resulting in an insufficient amount of blood sample. This nurse had no further complications. Staff had been excited to try the new equipment.

The overwhelming response from staff was the machine provided a safer technique of obtaining a blood sample for the common test of Protimes / INR we do almost daily.

There were no missed labs that required a second draw from another nurse / skilled nursing visit. The machine was lightweight and compact making transportation easy. Staff reported use the safety lancet provided a safer method of lab drawing and disposal of equipment then doing a venous puncture. Patient's tolerated the finger stick without difficulty. Obtaining results in the home, being able to call the physician or anticoagulation clinic from the home and sometimes receiving new orders while still in the patient's home increased the quality and effectiveness of care. The evaluation process provided sufficient information to determine this machine achieved its goal, met our needs, and is appropriate to continue its use.

If there had been any malfunctions or recall with the equipment we knew where the machine was at all times and which patient had been tested by it.

Lessons learned and Recommendations

The value of going through of whole process of identifying safer medical equipment to try with the sharp injury prevention team is essential to having a positive outcome. Clearly defining needs and process heightened the possibility of finding the equipment that was right for our agency.

Table of hours for Evaluating Safer medical devices

Type of Staff	Training	Evaluation
Administrative / Management	3	4
Clinical	2	12